TO: W. R. Corey
J. Alley
C. Paton
R. G. Potter
[redacted]

2/8/77

~~① J. Alley~~
② Dielectrics Phthalate covers

From: G. Barton

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Dielectric Fluid to Replace PCBs Is Introduced by GE

Journal of Commerce Staff

A new PCB-free dielectric fluid called "Dielektrol I" was introduced Wednesday by the Capacitor Products Department of the General Electric Co. at a New York City press conference.

General Electric said it spent "several million dollars" to develop this biodegradable fluid to replace PCBs (polychlorinated biphenyls) which are being phased out on account of allegations that discharges from plants into rivers and streams caused health and environmental problems.

Discharges of PCBs over a period of many years from GE plants at Hudson Falls, N.Y. and Ft. Edward, N.Y. are considered to be the major source of PCB pollution of the Hudson River.

Because of the contamination the New York State Department of Environmental Conservation in February 1976 banned all Hudson River fishing between Ft. Edward and Troy, N.Y. and commercial fishing of most species from Troy to New York 1City.

Monsanto Industrial Chemicals Co., the only producer of PCBs, has said it will stop production by Oct. 31.

L. P. Hart Jr., general manager of the Capacitor Products Department at Hudson Falls denied that any human being had suffered anything more than slight skin irritations from PCB. He reported, however, that PCB contaminated rice in Japan had made many people ill but no fatalities were reported. It also adversly affected a number of poultry in Sweden where the first alarm regarding PCB was sounded.

Mr. Hart said that "dielektrol" has been used in many small and large capacitors made by General Electric and will be used in all of them after June 30 when use of PCB will be discontinued. He said that the quality of the capacitors has also beein improved since General Electric adopted polypropylene film to replace paper in the capacitors.

Mr. Hart noted that GE investigated more than 100 fluids prior to the decision to market capacitors impregnated with "Dielektrol I" fluid, but found that none of them were able to meet the qualifications which both PCB and "Dielektrol" satisfy.

"Dielektrol" has the advantage that it is said to be completely biodegradable. General Electric said the new product is actually an alloy of several chemicals starting with phthalic anhydride and alcohol and certain proprietary chemicals as well as stabilizers. Mr. Hart noted that "Dielektrol I" is flammable and that safety precautions have been taken in the construction of the case in which it is held.

General Electric is using the new material in capacitors but not in transformers where silicones are being utilized instead of PCB.

General Electric is ready, Mr. Hart said, to license "Dielektrol I" to anybody including competitors.

Asked if it is available for evaluation by other companies Mr. Hart replied that if anybody is willing to send a tanktruck to one of the few plants, he will be provided with the new fluid. He said that the price at present is substantially equivalent to that of PCB, but that while the price of PCB is rising he expects the price of the new material to go down as mass production develops.